



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Charles A. Miller

Appl. No. 10/026,471

Filed: December 27, 2001

For: **Probe Card Cooling Assembly
with Direct Cooling of Active
Electronic Components**

Confirmation No. 7770

Art Unit: 2835

Examiner: Anthony Edwards

Atty. Docket: 2026.0020000/MVM/GSB

Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicant has listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application

be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicant has checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
 - ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was

first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ c. Attached is our PTO-2038 Credit Card Payment Form **[OR]** Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
 - ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
 - ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more

than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below:
- ☐ 7. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. _____, filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

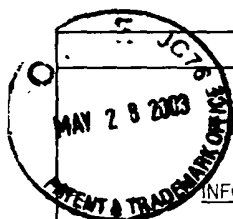
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Michael V. Messinger
Attorney for Applicant
Registration No. 37,575

Date: May 28, 2003

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600



FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
2026.0020000/MVM/GSBAPPLICATION NO.
10/026,471APPLICANT
Charles A. MillerFILING DATE
December 27, 2001GROUP
2835

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	4,000,509	12/1976	Jarvela	357	81	
	AB1	4,245,273	01/1981	Feinberg <i>et al.</i>	361	382	
	AC1	4,561,040	12/1985	Eastman <i>et al.</i>	361	385	
	AD1	4,757,255	07/1988	Margozzi	324	158F	
	AE1	4,778,326	10/1998	Althouse <i>et al.</i>	414	786	
	AF1	4,954,774	09/1990	Binet	324	158F	
	AG1	5,198,752	03/1993	Miyata <i>et al.</i>	324	158F	
	AH1	5,198,753	03/1993	Hamburgen	324	158F	
	AI1	5,476,211	12/1995	Khandros	228	180.5	
	AJ1	5,568,054	10/1996	Iino <i>et al.</i>	324	760	
	AK1	5,690,749	11/1997	Lee	134	6	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1	WO 95/14314	05/1995	WIPO			Yes No
	AM1	WO 96/17378	06/1996	WIPO			Yes No
	AN1	WO 00/33089	06/2000	WIPO			Yes No
	AO1						Yes No
	AP1						Yes No

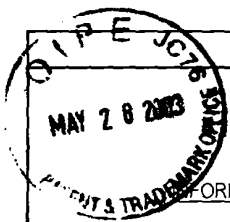
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>1</u>	Advanced Electronic Packaging - With Emphasis on Multichip Modules, William D. Brown, (Ed.) "13.5 Competitive Mainframe Packaging Examples," pages 547-550, IEEE (1999).
	AS	<u>1</u>	Electronic Packaging and Interconnection Handbook, Charles A. Harper (Ed.), "2.7 High Heat-Load Cooling," pages 2.57-2.66, Third Edition, McGraw-Hill (2000).
	AT	<u>1</u>	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
2026.0020000/MVM/GSBAPPLICATION NO.
10/026,471APPLICANT
Charles A. MillerFILING DATE
December 27, 2001GROUP
2835

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	5,834,946	11/1998	Albrow <i>et al.</i>	324	760	
	AB2	5,917,707	06/1999	Khandros <i>et al.</i>	361	776	
	AC2	6,056,627	05/2000	Mizuta	451	59	
	AD2	6,085,831	07/2000	DiGiacomo <i>et al.</i>	165	104.33	
	AE2	6,110,823	08/2000	Eldridge <i>et al.</i>	438	660	
	AF2	6,140,616	10/2000	Andberg	219	444.1	
	AG2	6,169,409	01/2001	Amemiya	324	754	
	AH2	6,184,053	02/2001	Eldridge <i>et al.</i>	438	52	
	AI2	6,255,126	07/2001	Mathieu <i>et al.</i>	438	15	
	AJ2						
	AK2						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2						Yes No
	AM2						Yes No
	AN2						Yes No
	AO2						Yes No
	AP2						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>2</u>	
	AS	<u>2</u>	
	AT	<u>2</u>	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Sterne Kessler Goldstein Fox

ATTORNEYS AT LAW



Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cornwell
Robert W. Esmond
Tracy Gene G. Durkin
Michael A. C. Mbaia
Michael B. Ray
Robert E. Sokohi
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Aicon
Robert C. Milcraig
Lawrence B. Bugaisky
Donald J. Featherstone
Michael V. Messinger

Judith U. Kim
Timothy J. Shea, Jr.
Patrick E. Garrett
Heidi L. Kraus
Edward W. Yee
Albert L. Ferro*
Donald R. Barowit
Peter A. Jackman
Molly A. McCain
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Albert J. Fasulo II*
Eldora Ellison Floyd
Thomas C. Fiala
Brian J. Del Buono
Virgil Lee Beaton

Kimberly N. Reddick
Theodore A. Wood
Elizabeth J. Haanes
Bruce E. Chalker
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lullier
Rae Lynn Prengaman
Jane Shershenovich*
Lawrence J. Carroll*
George S. Bardmesser
Daniel A. Klein*
Rodney G. Maze
Jason D. Eisenberg
Michael A. Specht
Andrea J. Karmage
Tracy L. Muller*
Jon E. Wright*

LuAnne M. Yuricek*
Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Ann E. Summerfield
Helene C. Carlson
Gaby J. Longworth
Matthew J. Dowd
Aaron L. Schwartz
Angelique G. Uy
Mary B. Tung
Katrina Y. Pei
Bryan L. Skeltor
Robert A. Schwartzman
John J. Figueroa
Timothy A. Doye
Jennifer R. Mahalingappa

Teresa A. Coelia
Jeffrey S. Lundgren
Victoria S. Rutherford

Of Counsel
Kenneth C. Bass III
Lisa A. Dunner
Evan R. Smith

*Admitted only in Maryland
*Admitted only in Virginia
*Practice Limited to
Federal Agencies

May 28, 2003

WRITER'S DIRECT NUMBER:

(202) 772-8667

INTERNET ADDRESS:

MIKEM@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Art Unit 2835

Re: U.S. Utility Patent Application
Appl. No. 10/026,470; Filed: December 27, 2001
For: **Probe Card Cooling Assembly with Direct Cooling of Active
Electronic Components**
Inventor: Charles A. Miller
Our Ref: 2026.0020000/MVM/GSB

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement;
2. Form PTO-1449 listing twenty-five (25) cited documents; and
3. Copies of the twenty-five (25) cited documents; and
4. One (1) return postcard.

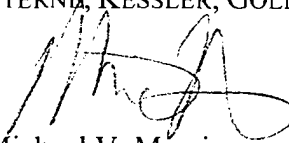
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents
May 28, 2003
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Michael V. Messinger
Attorney for Applicants
Registration No. 37,575

MVM/GSB:krh
Enclosures

SKGF_DC1:135206.1